CLAIMS

1. Composite wear component produced by classical or centrifugal casting and consisting of a metal matrix whose working face or faces include inserts which have a very high wear resistance, characterized in that the inserts consist of a ceramic pad, this ceramic pad consisting of a homogeneous solid solution of 20 to 80 % of Al_2O_3 and 80 to 20 % of ZrO_2, the percentages being expressed by weights of the constituents, and the pad then being impregnated with a liquid metal during the casting.

2. Composite wear component according to Claim 1, characterized in that the ceramic material includes from 55 to 60 % by weight of Al_2O_3 and from 38 to 42 % by weight of ZrO_2.

3. Composite wear component according to Claim 1, characterized in that the ceramic material includes from 70 to 77 % by weight of Al_2O_3 and from 23 to 27 % by weight of ZrO_2.

4. Composite wear component according to ~~any one of the preceding claims~~ Claim 1, characterized in that the content of ceramic materials in the insert is between 35 and 80 % by weight, preferably between 40 and 60 % and advantageously of the order of 50 %.

5. Composite wear component according to ~~any one of the preceding claims~~ Claim 1, characterized in that the inserts consist of an aggregate of composite ceramic grains which have a particle size within the range F6 to F22 according to the FEPA standard.

6. Composite wear component according to ~~any one of the preceding claims~~ Claim 1, characterized in that the ceramic grains are manufactured by electrofusion, by sintering, by flame spraying or any other process.

7. Composite wear component according to ~~any one of the preceding claims~~ Claim 1, characterized in that the ceramic grains are joined integrally with the aid of an inorganic or organic liquid adhesive with a view to the production of the ceramic pad.

8. Composite wear component according to Claim 7,

Amended

characterized in that the pad does not contain more than 4 % of adhesive.

~~9.~~ Composite wear component produced by casting and composed of a metal matrix including at least one ceramic pad, characterized in that at least two ceramic pads are placed side by side, leaving a gap of the order of 10 mm in order to permit the arrival of the liquid metal.

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10. Composite wear component produced by classical or centrifugal casting according to ~~any of the preceeding claims~~ Claim 1 and made up of a metal matrix including a wear-resistant ceramic pad, characterized in that the ceramic pad is in the form of a honeycomb structure in which the various cells are of polygonal or circular shape within the ceramic phase.

11. Composite wear component according to Claim 10, characterized in that the thickness of the walls of the various cells constituting the ceramic phase varies from 5 to 25 mm.